

NLDAS shortwave forcing ...

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There is an oddity in the NLDAS shortwave downward forcing. I think it is probably the data rather than LIS but it would be good for people to be aware of it. I seem to recall some discussion of what happens for low sun angles but can't find it. Anyway, the behavior near the terminator is not realistic at all, the downwelling shortwave drops to zero or near zero, then pops back up to a high value before going to zero in the nighttime areas.

I have attached two plots, one a map of SWDOWN at 15Z (about 9 am local time) and one a plot of the 0Z (6pm local) SWDOWN every day over summer 2003 for a point in Eastern Nebraska. The line graph shows a sinusoidal rise and fall as you would expect from the annual cycle, but also has two additional peaks. **Attachments:**

- [swdown_0Z.tiff](#) (28.9 K)
- [swdown_map.tiff](#) (39.1 K)

Tags: lis, nldas, shortwave, solar, forcing